

ABSTRACT OF THE DISCLOSURE

A motor-driven compressor for compressing a refrigerant in an air conditioning system includes an
5 electric motor, a swash plate-type compression unit driven by the electric motor, and a cooling channel for returning the refrigerant used by the air conditioning system to a suction chamber of the compression unit. The cooling
10 channel has an upstream section including an armature chamber of the electric motor, and a downstream section extending from the armature chamber to the suction chamber in such a manner that the downstream section is separated from a crank chamber of the compression unit.